3. (Amended) The planar reference electrode as set forth in claim 16, wherein the plate is selected from the group consisting of alumina, glass and plastic substance.

4. (Amended) The planar reference electrode as set forth in claim 16, wherein the electrode is selected from the group consisting of Ag, Pd, Cu, Pt, Ag/AgCl, Ag containing 1-5 weight% of Pd and Ag coated with Nafion.

5. (Amended) The planar reference electrode as set forth in claim 16, wherein the inner reference solution is an electrolyte containing hydrogel which consists of 85-99% weight% of glycerol solution; 1-~~19~~ 10 weight% of agar solution; polymeric glue; or a soluble polymer dissolved with hygroscopic substance.

P.14, l.16

6. (Amended) The planar reference electrode as set forth in claim 5, wherein the electrolyte is $AgNO_3$ or perchloric acid for a Ag electrode, KCl or NaCl for a Ag/AgCl electrode, and KOH or NaOH for a mercury/mercury oxide electrode.

7. (Amended) The planar reference electrode as set forth in claim 16, wherein the non-porous protection membrane is formed by polyester.

10. (New) A planar reference electrode comprising: a plate; an electrode connecting part; an electrode; an insulating membrane; an inner reference solution; a porous polymer membrane which functions as both a junction and a protection membrane, wherein the plate and the porous polymer membrane are formed of different materials.

11. (New) The planar reference electrode as set forth in claim 10, wherein the porous polymer membrane is formed of cellulose nitrate.

12. (New) The planar reference electrode as set forth in claim 10, wherein the plate is selected from the group consisting of alumina, glass and polycarbonate.

13. (New) The planar reference electrode as set forth in claim 10, wherein the electrode is selected from the group consisting of Ag, Pd, Cu, Pt, Ag/AgCl, Ag containing 1-5 weight% of Pd and Ag coated with Nafion.

14. (New) The planar reference electrode as set froth in clam 10, wherein the inner reference solution is an electrolyte containing hydrogel which consists of 85-99% weight% of glycerol solution; 1-10 weight% of agar solution; polymeric glue; or a

soluble polymer dissolved with hygroscopic substance.

15. (New) The planar reference electrode as set forth in claim 14, wherein the electrolyte is $AgNO_3$ or perchloric acid for an Ag electrode, KCl or NaCl for an Ag/AgCl electrode, and KOH or NaOH for a mercury/mercury oxide electrode.

16. (New) A planar reference electrode comprising: a plate; an electrode connecting part; an electrode; an insulating membrane; an inner reference solution; a junction; and a non-porous protection membrane, wherein the junction is formed in a line of micro capillary.

17. (New) A method for fabricating a planar reference electrode which comprises:

(1) forming an electrode connection part on a plate;

(2) forming an electrode on the plate by using a screen printing method;

(3) forming an insulating layer by screen printing on the electrode, to provide a well around the electrode and a line of micro capillary;

(4) placing an inner reference solution within the well; and

(5) forming a non-porous protection membrane to cover the

inner reference solution.

18. (New) A method for fabricating the planar reference electrode which comprises:

(1) forming an electrode connection part on a plate;

(2) forming an electrode on the plate by using a screen printing method;

(3) forming an insulating layer by screening printing on the electrode, to provide a well around the electrode;

(4) placing an inner reference solution within the well; and

(5) forming a porous protection membrane to cover the inner reference solution.